

In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-6. (Cancelled)

7. (Currently Amended) A high frequency substrate, comprising at least:

a first metal layer;

a first dielectric layer on the first metal layer, wherein the first dielectric layer is made of a high dielectric coefficient material;

a second metal layer on the first dielectric layer;

a second dielectric layer on the second metal layer, wherein the second dielectric layer comprises a first opening;

a third dielectric layer within the first opening and on the second metal layer, wherein the third dielectric layer is made of a low dielectric coefficient material, and a dielectric coefficient of the third dielectric layer is smaller than a dielectric coefficient of the second dielectric layer;
and

a high-frequency signal transmission line on the third dielectric layer.

8. (Withdrawn) The high frequency substrate according to claim 7, wherein the second dielectric layer further comprises a second opening.

9. (Withdrawn) The high frequency substrate according to claim 8, wherein the high-frequency substrate further comprises:

a fourth dielectric layer within the second opening and on the second metal layer, wherein the fourth dielectric layer is made of a high dielectric coefficient material; and
a low-frequency signal transmission line on the fourth dielectric layer.

10. (Original) The high frequency substrate according to claim 7, wherein the second dielectric layer is made of a high dielectric coefficient material.

11. (Original) The high frequency substrate according to claim 10, wherein the high-frequency substrate further comprises a low-frequency signal transmission line on the second dielectric layer.

12. (Original) The high frequency substrate according to claim 7, wherein the value of the dielectric coefficient for the high dielectric coefficient material is more than 4.

13. (Original) The high frequency substrate according to claim 7, wherein the low dielectric coefficient material is polytetrafluoroethylene (PTFE)

14. (Original) The high frequency substrate according to claim 7, wherein the value of the dielectric coefficient for the low dielectric coefficient material is less than 4

15. (Currently Amended) The high frequency substrate according to claim 7, wherein the a top superficial measure surface area of the third dielectric layer is equal to or larger than the a bottom superficial measure surface area of the high-frequency signal transmission line.

16. (Currently Amended) A substrate, comprising at least:
a first dielectric layer which comprises an opening, wherein the first dielectric layer is made of a high dielectric coefficient material;
a second dielectric layer within the opening, wherein a dielectric coefficient of the second dielectric layer is smaller than a dielectric coefficient of the second dielectric layer; and
a signal transmission line on the second dielectric layer.

17. (Original) The substrate according to claim 16, wherein the second dielectric layer is made of a low dielectric coefficient material and the signal transmission line is a high-frequency signal transmission line.

18. (Original) The substrate according to claim 17, wherein the value of the dielectric coefficient for the low dielectric coefficient material is less than 4

19. (Withdrawn) The substrate according to claim 16, wherein the second dielectric layer is made of a high dielectric coefficient material and the signal transmission line is a low-frequency signal transmission line.

20. (Withdrawn) The substrate according to claim 19, wherein the value of the dielectric coefficient for the high dielectric coefficient material is more than 4.

21-28. (Cancelled)

29. (New) The high frequency substrate according to claim 7, wherein the first metal layer is a ground plane and the second metal layer is a power plane.

30. (New) The high frequency substrate according to claim 7, wherein the first metal layer is a power plane and the second metal layer is a ground plane.

31. (New) The substrate according to claim 16, wherein the first dielectric layer is made of a high dielectric coefficient material.

32. (New) The high frequency substrate according to claim 31, wherein the high-frequency substrate further comprises a low-frequency signal transmission line on the second dielectric layer.

33. (New) The substrate according to claim 31, wherein the value of the dielectric coefficient for the high dielectric coefficient material is more than 4.

34. (New) The substrate according to claim 17, wherein the low dielectric coefficient material is polytetrafluoroethylene (PTFE)

35. (New) The high frequency substrate according to claim 17, wherein the value of the dielectric coefficient for the low dielectric coefficient material is less than 4

36. (New) The high frequency substrate according to claim 16, wherein a top surface area of the second dielectric layer is equal to or larger than a bottom surface area of the high-frequency signal transmission line.